



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,466	03/26/2004	Theodore Rappaport	02560035BB	7640

7590 11/15/2007
MOTOROLA, INC.
8000 West Sunrise Boulevard
Law Department - MD 1610
Plantation, FL 33322

EXAMINER

SAXENA, AKASH

ART UNIT	PAPER NUMBER
----------	--------------

2128

MAIL DATE	DELIVERY MODE
-----------	---------------

11/15/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/809,466

Applicant(s)

RAPPAPORT ET AL.

Examiner

Akash Saxena

Art Unit

2128

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 13-40 have been presented for examination based on the application filed on 14th September 2007.
2. Claim(s) 13-40 remain rejected under 35 USC § 112nd.
3. Claim(s) 13-40 remain rejected under 35 USC § 103.
4. The arguments submitted by the applicant have been fully considered. Claims 13-40 remain rejected and this action is made FINAL. The examiner's response is as follows.

Double Patenting

5. Examiner withdraws the double patenting rejection in view of the terminal disclaimer filed 14th September 2007.

Response to Claim Rejections - 35 USC § 112

6. Applicant has amended the independent claims 13 and 27. However the amendment did not cure the deficiency. Please see updated rejection below.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 13-40 are objected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention as it is unclear how the "or" should be interpreted.

Art Unit: 2128

Regarding Claims 13 & 27

The claim 13 & 27 are amended to add:

a) using a computer for creating and formatting, and editing or manipulating one or more objects defining an environment in which an in-building or campus communications network may be deployed, said environment having at least one of floors, walls, partitions, buildings, building complexes or compounds, terrain, foliage, or other sites or obstructions;

It is still unclear what combination of the actions is intended to be performed.

For example, should it be read like:

a) using a computer for creating and formatting, and editing or manipulating one or more objects...

or it should be read like:

a) using a computer for creating and formatting, and editing or manipulating one or more objects...

or it should be read like:

a) using a computer for creating and formatting, and editing or manipulating one or more objects

Hence the rejection is maintained. Dependent claims 1—26 and 28-40 do not cure

this deficiency of independent claims 13 and 27 and are rejected likewise

respectively.

Claim Interpretation

8. Claim 27 discloses limitations:

means of verifying, using a computer, the sufficiency of said one or more objects to ensure a useful definition of said environment and notifying a user of results of said verification of sufficiency;

means of generating at least one formatted drawing or at least one set of formatted data containing computer representations of said one or more objects in a form transportable to and usable by a communications engineering or network management application; and

means of rendering a three dimensional view of said environment.

As claimed they are not interpreted to invoke protection under 35 USC 112 ¶6th as

“means of” is not “means for”. Hence the plain meaning is applied to these

limitations.

Response to Remarks for Claim Rejections - 35 USC § 103

(Argument 1) Applicant has argued the following:

As the Examiner concedes, the Kozah reference does not teach "grouping" and Kozah does not teach generating a drawing or formatted data of a computer representation.

(Response 1) In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Grouping feature was rejected as being taught by Awe.

(Argument 2) Applicant has argued the following:

Applicant further points out that the Kozah reference must acquire on-site measurements at a local site using a distance measuring device 12 (camera) in an adjacent room hardwired to a computer. No such requirement exists in applicant's invention. When Kozah's distance measuring device 12 is "static" it must be mounted on a tripod or be stationary; when Kozah's measuring device is a "free-floater" it may be hand-held or tripod mounted; when Kozah's measuring device is a "semi-free floater" it includes a wand of a known length. Applicant's claims are not directed to acquiring on-site measurements at a specific location, and as such the Kozah reference is not applicable to Applicant's invention.

(Response 2) In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., presence of the source of information gathering means recited positively or negatively) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

(Argument 3) Applicant has argued the following:

Applicant asserts that the Kozah reference is directed towards the acquisition of measurements as opposed to creating and formatting, and editing or manipulating one or more objects defining an environment. While the Examiner stated that Kozah "edits features afterward" (page 6 of

Art Unit: 2128

Office Action). Applicant points out that Kozah merely teaches that the "user may edit the window or display the window in a different viewing mode" (col. 8, lines 49-53). [1] Once an element is created and displayed by Kozah, the user is limited to checking the element's validity (col. 8, lines 54-55) [2] - and if needed, the user takes another measurement using the measuring device. This is not the equivalent of creating and formatting, and editing or manipulating one or more objects defining an environment ... [3] The entire Kozah reference is directed to measuring elements from a specific location 70 (or new measuring location 96) which requires moving measuring device 12 to take each measurement (col. 8, lines 62-64).

(Response 3) As per [1], applicant is correct that Kozah teaches editing features, however, as per [2], examiner respectfully disagrees with applicant as the specification states Col.8 Lines 54-55 states:

After the element is created, the CAD software displays the model of the element and the user checks the element's validity.

It is unclear how the applicant comes to the conclusion that "Once an element is created and displayed by Kozah, the user is limited to checking the element's validity" and secondly, where is the argued limitation that the user should be able/unable to create and display objects after performing the verification.

As per [3] Kozah clearly teaches the limitation of creating and formatting, and editing or manipulating one or more objects defining an environment ..." (Kozah: Fig.1; Col.2 Lines 62-66, Summary in general teaches creating, formatting, editing iteratively of one or more objects; Further see CAD on Fig.12).

(Argument 4) Applicant has argued the following:

Furthermore, since Kozha is limited to taking actual real-time measurements at a specific location, there would be no incentive or motivation to transport at least one formatted drawing or at least one formatted data containing one or more objects to another application. Again, the purpose of Kozah is to acquire valid, real-time measurements at a given location, and as such there is no incentive for Kozah to group objects into an editable layer. Kozah does not edit measurements of objects, Kozah takes more measurements. Accordingly, there would be no motivation for Kozah to use the teachings of Awe.

(Response 4) Applicant is alleging without pointing out which specific feature are not taught by either of the references. Motivation to combine the references is

Art Unit: 2128

appropriately addressed in the claim rejection, where Awe is used to create the 3D models streams (Awe: Col.5 Line 16-Col.6 Line 42) thereby augmenting the CAD software to create 3D model in Kozah (Kozah: At least Fig.12). Examiner finds applicant's arguments unpersuasive and maintains the rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. **Claims 13-16, 18-19, 21-30, 31-33 and 35-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,337,149 issued to Kozah et al (Kozah hereafter), in view of U.S. Patent No. 6,509,906 issued to Awe et al (Awe hereafter).**

Regarding Claim 13 (Updated 10/31/07)

Kozah teaches a computer implemented method for creating or manipulating one or more drawings representing a physical environment (Kozah: Abstract, Fig.1; Col.2 Lines 62-66), method comprising

Kozah teaches step a) using a computer for creating, and formatting, editing and manipulating one or more objects defining an environment in which an in-building (Kozah: Fig.1; Col.2 Lines 62-66; Col.4 Lines 10-12; Col.3 Lines 26-40; Col.11 Lines 16-22), said environment having at least one of floors, walls, partitions, buildings, building complexes or compounds, terrain, foliage, or other sites or obstructions (Kozah: Col.7 Lines 1-2 Lines 55-65; Col. 8 Lines 50-50 – for manipulating different objects) as acquiring measurements of environment having various features and then labeling the features with capability to edit features afterwards.

Kozah does not teach step b) grouping a number of said one or more objects into at least one editable layer.

Kozah teaches step c) verifying, using a computer, the sufficiency of said one or more objects to ensure a useful definition of said environment (Kozah: Col.5 Lines 11-14) and notifying a user of results of said verification of sufficiency (Kozah: Fig.9 Col.8 Lines 34-55);

Kozah does not explicitly teaches the step d) generating at least one formatted drawing or at least one set of formatted data containing computer representations of said one or more objects in a form transportable to and usable by a communications engineering or network management application; although Kozah teaches storing the object/position information in the CAD database in CAD application (Kozah: Col.9 Lines 13-31).

Kozah teaches step e) rendering a three-dimensional view of said environment (Kozah: Abstract; Col.4 Lines 1-12).

Awe teaches step b) grouping a number of said one or more objects into at least one editable layer (Awe: Fig.8 Element 806; Col.7 Line 16-20; Col.4 Lines 45-61) as groups the display representation.

Awe also teaches d) generating at least one formatted drawing or at least one set of formatted data containing computer representations of said one or more objects in a form transportable to and usable by a communications engineering or network management application (Awe: Col.3 Lines 18-60) as data stored in a storage device associated with a CAD program.

It would have been obvious to one (e.g. a designer) of ordinary skill in the art at the time the invention was made to apply the teachings of Awe to Kozah to create a three dimensional representation of the building data. The motivation to combine would have been that Kozah gathers the information and build the three dimensional model but does not disclose the details of how the measurements are mapped to the primitive objects (Kozah: Col.7 Lines 55-65; Awe: Col.1 Line 62-Col.2 Line 6) to

Art Unit: 2128

create a three dimensional view of the building, a deficiency cured by Awe by using streams (Col.5 Line 16-Col.6 Line 42) for a custom 3D view.

Regarding Claim 14

Kozah teaches comprising the step of adding or editing at least one object in said at least one editable layer or in said at least one formatted drawing or in at least one set of formatted data (Kozah: Col.11 Lines 16-22; Awe: Col.5 Lines 54-63).

Regarding Claim 15

Awe with Kozah teaches the step of moving at least one object in said at least one editable layer or in said at least one formatted drawing or in at least one set of formatted data (Awe: Col.4 Line 64-Col.5 Line 15 – changing the display representation – Col. Col.4 Lines 34-37 - eg. door swing/movement; Kozah: Col.8 Lines 16-19).

Regarding Claim 16

Awe teaches the step of modifying at least one object in said at least one editable layer or in said at least one formatted drawing or in at least one set of formatted data (Awe: Col.5 Lines 54-63).

Regarding Claim 18

Kozah teaches that step a) includes the step of tracing and adding a traced object to said one or more objects or one set of formatted data (Kozah: Col.2 Lines 37-50).

Regarding Claim 19

Kozah teaches step a) includes the step of modifying one or more objects or one of electrical properties, physical properties, aesthetic properties, or spatial

Art Unit: 2128

configurations of one or more objects (Kozah: Col.1 Lines 50-52, Col.2 Lines 43-48, Col.3 Lines 15-18).

Regarding Claim 21

Kozah teaches notifying performed in said verifying and notifying step is performed by prompting the user (Kozah: Col.7 Lines 61-65) and, when required to provide said useful definition (Kozah: Col.8 Lines 20-23), requires the user to correct any insufficiencies in response to an insufficiency notification (Kozah: Col.8 Lines 45-55; Fig.9).

Regarding Claim 22

Kozah teaches said communications engineering or network management application is selected from the group consisting of wireless propagation models, measurement tools, component placement or layout visualization tools, optimization tools, bill of materials generating tools, asset management tools, and network performance management or prediction tools (Kozah: Col.10 Lines 26-40).

Regarding Claim 23

Kozah teaches scaling at least part of said at least one formatted drawing or said at least one set of formatted data or at least one object of said one or more objects as sizing the drawing (Kozah: Abstract).

Regarding Claim 24

Kozah teaches step of adding measurement data to said at least one of said one or more objects or said at least one formatted drawing or said at least one set of formatted data (Kozah: Fig.7 steps 7.06-7.12).

Art Unit: 2128

Regarding Claim 25

Awe teaches the step of specifying or invoking a propagation model for performing predictions of performance (Awe: Fig.1-2, Col.5 Lines 19-25).

Regarding Claim 26

Awe teaches the step of specifying or invoking a listing of communications equipment (Awe: Col.3 Lines 41-50).

Regarding Claims 27-30

Apparatus claims 27-30 respectively disclose similar limitations as claims 13-16 and are rejected for the same reasons as claim 13-16 respectively. Kozah & Awe both disclose apparatus implementations (Kozah: Fig1, Awe: Fig.1).

Regarding Claim 32-33

Apparatus claims 32-33 respectively disclose similar limitations as claims 18-19 and are rejected for the same reasons as claim 18-19 respectively. Kozah & Awe both disclose apparatus implementations (Kozah: Fig1, Awe: Fig.1).

Regarding Claim 35-40

Apparatus claims 35-40 respectively disclose similar limitations as claims 21-26 and are rejected for the same reasons as claim 21-26 respectively. Kozah & Awe both disclose apparatus implementations (Kozah: Fig1, Awe: Fig.1).

10. Claims 17, 20, 31 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,337,149 issued to Kozah et al (Kozah hereafter), in view of U.S. Patent No. 6,509,906 issued to Awe et al (Awe hereafter), further in view of U.S. Patent No. 5091869 issued to Ingram et al (Ingram hereafter).

Regarding Claim 17

Teachings of Awe with Kozah are shown in claim 13 rejection above.

Awe with Kozah do not teach explicitly step of removing extraneous objects from said one or more objects or from said at least one formatted drawing or in from at least one set of formatted data.

Ingram not teach explicitly step of removing extraneous objects from said one or more objects or from said at least one formatted drawing or in from at least one set of formatted data (Ingram: Col.12 Lines 21-23).

It would have been obvious to one (e.g. a designer) of ordinary skill in the art at the time the invention was made to apply the teachings of Ingram to Kozah & Awe to electronically collect floor plan based information. The motivation to combine would have been that one skilled in the art and Kozah are aware of Ingram's teachings (Kozah: Background) and would use Ingram to increase the accuracy of measurements taken to eliminate deficiencies.

Regarding Claim 20

Ingram teaches notifying performed in said verifying and notifying step is performed in an automatic fashion without feedback being provided to the user (Ingram: Col.5 Lines 44-48).

Regarding Claim 31 and 34

Apparatus claims 31 and 34 respectively disclose similar limitations as claims 17 and 20 and are rejected for the same reasons as claim 17 and 20 respectively. Kozah, Awe and Ingram, all disclose apparatus implementations (Kozah: Fig1, Awe: Fig.1, Ingram: Fig.4).

Conclusion

11. All claims are rejected.

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 2128


Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Akash Saxena whose telephone number is (571) 272-8351. The examiner can normally be reached on 9:30 - 6:00 PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini S. Shah can be reached on (571)272-2279. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Akash Saxena/


KAMINI SHAH
SUPERVISORY PATENT EXAMINER